

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2004/000176

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.<sup>7</sup>: A23C 19/05, A23J 1/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIDS, CHEMABS, FSTA: milk, dairy, cheese, protein, curds, solubilise, solubilize, dissolve, coagulate, rennin, whey, serum, precipitate, concentrate, composition

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2001/011977 A1 (Societe Des Produits Nestle) 22 February 2001 whole of document	1-32
A	WO 2000/019840 A1 (Bioflash) 13 April 2000 whole of document	1-32
A	US 4 407 747 A (Lippe <i>et al</i> ) 4 October 1983 whole of document	1-32

☐ Further documents are listed in the continuation of Box C
 ☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
9 November 2004

Date of mailing of the international search report 17 NOV 2004

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/NZ2004/000176**

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: **33 to 36**  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
The claims are to a milk proteinate composition containing both para-kappa-casein and whey proteins which does not forma gel when concentrated. The claims are not limited to any specific process for producing this, and while the features of these claims are disclosed in the description, there is insufficient disclosure in the description of the proteinate composition for any meaningful search to be conducted.
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:  
See supplemental box.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

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PCT/NZ2004/000176

**Supplemental Box**

(To be used when the space in any of Boxes I to VIII is not sufficient)

**Continuation of Box No.:**

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1 to 32 are to a process for making a protein composition from a dairy stream comprising the steps of forming and separating a protein concentrate and serum, solubilising the protein concentrate, combining the solubilised protein concentrate and serum and concentrating the protein composition formed. It is considered that the process of forming a protein composition from a dairy stream with the specified steps comprises a first "special technical feature".
2. Claims 33 to 36 are to a milk proteinate composition containing both para-kappa-casein and whey protein which does not form a gel when concentrated.. It is considered that the milk proteinate composition containing para-kappa-casein and whey protein which does not form a gel when concentrated comprises a second special technical feature.

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, a priori.

Only the first invention was searched. As indicated in Box II, there is insufficient disclosure of the second invention for any meaningful search to be conducted.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/NZ2004/000176

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
WO	2001/011977	AU	56233/99	EP	1 209 980
		BR	9917462	MX	PA02001680
		CA	2 391 360	NZ	517 220
WO	2001/019840	AU	55920/99	CA	2 346 377
		CA	2 248 380	EP	1 119 263
		CA	2 256 284		
US	4 407 747	BE	885 722	NL	8004587

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX